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ABSTRACT

This paper deals with the way in which human beings use time, the conceptualization of which is a significant part of the interaction of all human beings and the study of which is particularly significant in the analysis of intercultural communication. The cultural values of the division of time into seconds, minutes, hours, days, weeks, months, years, and groups of years and the particular cultural orientation of behavior modified by conceptualizations of past, present, and future are the focal points of this paper. The framework is the major research effort of the last ten years; the specific parameter is the research conducted on the variable of time within the communication discipline. (Author/TJ)

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# TIME: A SIGNIFICANT VARIABLE OF INTERCULTURAL COMMUNICATION RESEARCH

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Take an ordinary watch and examine it in terms of your knowledge of communication theory and practice. The result will not be startling, but should prove to be stimulating and provocative; maybe even hueristic. Some interesting insights can be gleaned from an analysis of the message of the clock as a medium of communication. The mechanistic marvel of the ordinary clock and its impact on human behavior is often ignored by communication scholars.

Man's interest in time caused the development of many instruments to measure the passage of time: a burning candle, sun dial, pendulum calendars, sand in an hourglass, weight clocks, spring-tension clocks, electric clocks, and solar battery clocks. But too frequently, these time measuring instruments are confused with the concept of time itself.

Although it is considered impossible to identify the true beginnings of the clockmaking trade, the earliest known sunclocks are Egyptian shadow clocks dating from the 10th century B.C. (Fraser, 1978, p. 132).

The time clock punching activity of Americans is one measurement of successful society functioning. In America, how one uses time indicates the values that American society and the societal members place on work, mobility, the "good life," and the education of future generations.

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N.B. Throughout this paper I have tried to underline all references to the concept of time.

Many take the maxim "time is money" at face value and orient their lives accordingly.

The temporal dimension of time is important to most of us. You probably have a watch. And today it is popular for the watch to not only indicate the hour, minute, and second, but also the month and day of the week (by both number and name). There's probably a clock nearby on the wall at work. You probably have several clocks at home--an alarm clock, a clock radio, a decorative clock, stove clock, etc.--Americans seem almost obsessed by time. Some people are typically early or right on time for dates, meetings, and appointments. We generally view this positively. Then, there are those who seem to always be "running late," who consistently make others wait (doctors and lawyers for example). Generally, the more important the person (the higher the status) the longer people will wait for that person. If you are "on time," "ahead of time," or behind time" you communicate to others that you are "early" or "late" and, depending on the situation, your use of time may create either a positive or negative impression.

Some try to eliminate the domination of time by refusing to wear watches. For them, like everyone else, time is obtrusive, omnipresent, but they seem to be asking: "why does a 'clock' when strapped on our wrist become a 'watch' unless it suggests that we should be watchful of fleeting time?" And, if the watch is modern enough, one can "watch" as months, days, hours, seconds, and milli-seconds slip constantly away (McDermott, 1974), pp. 268-269). American culture

demands a certain amount of "clock-watching." When asking someone how far they live from work, we are not surprised to hear an answer expressed in time instead of blocks or miles (as in "oh I'm only about a 15-20 minute drive from work"). Thus, time is substituted for space (McDermott, 1974, p. 269). In answering letters, returning telephone calls, and acknowledging gifts, we communicate one message by our response and another message by when we respond.

There are clear socio-cultural rules for not only a particular activity, but the timing of that activity. For example, it is all right for one of my students to call me at home, but the same call at 2:00 a.m. had better be accompanied by a very good explanation.

Status is directly related to the temporal dimension. It is acceptable to be a bit late for a fellow colleague, but one doesn't keep the "boss" waiting. Violations of acceptable socio-cultural norms with respect to time can be serious. How serious is dependent upon culturally dictated time-values.

A common reaction to marijuana and L.S.D. is an alteration of awareness and perhaps the most common result is the alteration of temporal perception. Almost uniformly, psychedelic drugs increase time spans--duration is lengthened relative to ordinary time experience (Ornstein, 1969, p. 47).

Parkinson's famous law states that activities expand to fill the available time for their completion (Parkinson, 1957).

Clearly, our time on earth is limited and this time scarcity is

a key concept of Linder's book (1970). A fairly common complaint of Americans is that they feel the "pressure" of time limitations.

Some familiar statements that follow ordinary experience point out the omnipresence of time: "How time passes when you are having a good time" and "A watched pot never boils." As we experience enjoyment (e.g., a nice vacation) time seems to escape quickly, but when things are dull and boring, minutes seem like hours. So temporal variability seems correlated to one's value of the experience.

Computer centers developed time-sharing services, in which several users share one computer via telecommunications. And, with the development of microcomputers in the 1970's, the computer actually became a new information medium of communication, with international networks capable of not only the "wired society" some had hoped for, but a "wired world" (Martin, 1978, p. 84).

Time efficiency experts have invaded almost all human activity. To extend time and to behave efficiently in order to conserve time seems to be an almost universal human trait, at least in the sense that to extend the life span (hence, increase time spent living), seems universal. Americans, in particular, seem intently conscious of time for work and play; the goal is always for more time. As I write these words, the American people (and people the world over) are particularly concerned with energy supplies and related costs. However, what may be an even scarcer commodity is time. As technological advances increase, the supply of goods and services

increases and the consumption of more and more goods and services reduces the amount of time; thus, time will become more and more scarce--at least that is the argument of Staffan Linder, author of The Harried Leisure Class (Linder, 1970).

Humans react predictably regarding time. For example, I recently interviewed a young professor for a staff position and described the university's fringe benefits, including our retirement program. The young professor responded, "It's much too soon for me to be particularly concerned about retirement." And, with that, the discussion about retirement ceased. Most young people react similarly. Ask any life insurance salesperson. Most people are primarily concerned about their present, immediate concerns. But the same insurance salesperson can demonstrate that a small planning change introduced now can reap major benefits for the future (for example, the cost now will be less than for the same coverage later).

The scholarly focus on the past is the domain of historians; the scholarly focus on the future is the domain of futurists. Earl Joseph, editor of Future Trends, identified five time periods of futurists (Joseph, 1974):

(1) now--the imediate future (0-1 year from now)

(2) near-term future--(0-5 years from now)

(3) middle-range future--(5-20 years from now)

(4) long-range future--(20-50 years from now)

(5) far-future--(50 or more years from now)

The typical conception of time as limited to a past-present-future structure gives researchers the deceptive appearance of covering all possibilities for the expression of time as a variable. Essentially, the viewpoint of this past-present-future structure is merely a convenient although arbitrary paradigm of categorization and is subject to the limitations of almost all category schemes--there are experiences that don't quite fit (a sort of "square fitting into a circle" phenomenon) forcing the need for a miscellaneous/general category.

Below is a visual representation of (A) the typical tri-partite conception of time (past, present, and future), (B) the relationship of this tri-partite categorization of time and human existence in Western thought, and (C) an alternative schemata of a more realistic perspective of human existence viewed interculturally along temporal dimensions:

(A) (A)

PAST PRESENT FUTURE

TYPICAL TRI-PARTITE CONCEPTION OF TIME

(B) (B)

BIRTH GROWTH DEATH

HUMAN EXISTENCE--WESTERN THOUGHT

(INFINITY) (C) (C) (INFINITY)

...CONCEPTION-BIRTH-PHYSICAL LIFE ON EARTH-SUPERNATURAL EXISTENCE...

Several comments about future studies frequently encountered in the literature of futurists are worth noting. Some have become so attractive to pop-philosophical thought that they adorn walls in the form of posters--"Today is the first day of the rest of your life" and "The Future Does Not Exist." And, since by definition, the future has never existed, then futurists must be content to contemplate the future on the basis of past experience and knowledge. But perhaps most provocative is the notion that time is fleeting and constant. The opening paragraph to Robert Ornstein's book, which focuses on time duration, clearly presents the mystique (Ornstein, 1969, p. 15): "Time is one of the continuing, compelling and universal experiences of our lives, one of the primary threads which combine in the weave of our experience. All of our perceptual, intellectual and emotional experiences are intertwined with time. We continually feel time passing but where does it come from? We continually experience it but cannot taste it, see it, smell it, hear it, or touch it. How, then, do we experience time? What do we use to experience it?"

Scholars too have difficulty with the concept of time even when time is not the central thrust of their content. For an example of what I mean, consider those who write mass communication textbooks. They want to say something about the future, but an examination of their chapter titles and the content reveals a certain amount of uneasiness. For example, one author calls the final chapter, "The End of the Beginning" (Gordon, 1977) and he states his frustrations:

"Entering the end of history that is just beginning is, for me, a discouraging undertaking" (p. 301); another entitles his final chapter simply, "Future" and then states that he offers "a few words at the end on tomorrow" (Pember, 1977, p. 368); and the shortest chapter I have seen is entitled "Tomorrow" and contains three short paragraphs less than one-half page in length (Murphy, 1977, p. 420).

One of the obvious, but often ignored characteristics of technological change is the birth of new options for human behavior. For example, one of my former professors at The University of Michigan's Institute for Social Research, John P. Robinson, conducted a multi-national study called "Television's Impact on Everyday Life: Some Cross-National Evidence." An interesting finding of this study was that people who own television sets spend less time sleeping, working on household tasks, engaging in conversation, and visiting than people without television (Robinson, 1972).

Consider another point related to time and media. I subscribe to more than 15 professional journals; I receive a daily newspaper, a weekly university newspaper; I also receive another five magazines (general news magazines, specialized interest magazines, etc.). I try to keep up with these, but inevitably I get behind. My "reading" time became so congested that I am forced to "scan" the materials. James Grunig, author of The Decline of the Global Village, makes a similar observation and goes on to point out that such "exposure" is not the same as to take the time to read the materials in depth (Grunig, 1976, p. 99.).

Tom Bruneau, the most avid proponent of communication research dealing with the concept of time, reviewed the many forms of time. A continual obstacle for cross cultural studies dealing with time is the confusion of disparate time forms and concepts: physics of time, mathematical time, cultural time, conceptual time, objective (clock) time, psychological time, biological time, social time, and experiential (perceptual) time (Bruneau, 1974, 1976, 1977, 1979). Ornstein says, "we ought to be careful not to confuse experiential time with other time, we ought not confuse the different modes of time experience with one another" (Ornstein, 1969, p. 20). Since his particular interest is on time duration experience, Ornstein suggests four major varieties of time experience: (1) the experience of very short interval--the present, (2) the longer experience of duration, (3) the experience of the future or temporal perspective, and (4) the experience of simultaneity (Ornstein, 1969, p. 20).

In western countries and in those countries influenced by Western culture, all human activity is regulated chronometrically. An extensive bibliography containing more than 3,000 references to a variety of publications of the past 20 years reflects the diversity of scholarly interest. Even a cursory examination of the content headings reveals the interdisciplinary interest in time (Krucy, Bacon, Turner, 1976):

Philosophy of Time
Religion
    General
    Eastern Religion
History
Arts
    General
    Time and Language
    Time and Music
Economics
Sociology
Psychology of Time
    General
    Time Estimation, Judgement and Discrimination
    Duration
    Time Orientation and Organization
    Temporal Experience
    Perception: Future Time Perspective
    Children and Time Sense
    Memory
    Mental Illness, Drugs and Suicide
Precognition
Biological Time
    General Biological Rhythms, Biological Clocks and Biological Time Estimation
    Circadian Rhythm
        Nature and Mechanism
        DNA and RNA Biosynthesis
        Mitosis, Cell Division and Cell Proliferation
        Energy Factors
        Enzymes
        Hormones
        Light Signals and Sensory Input
        Photoperiodism
        General Plant Circadian Rhythms
        Temperature
        Activity Rhythms: Sleep-Wakefulness
        Respiration
        Cardiac Function and Circulation
        Digestion and Feeding
        Excretion
        Neurophysiology
        Pharmacology, Chronotherapy and Toxicology
        Reproduction and Growth
        Behavior
        Miscellaneous
    Circannual Rhythms
    Other Rhythms and Cycles
    Evolution

Time and the Physical Sciences
    Time Measurement, Calendars and Clocks
    Cosmology
    General and Special Relativity: Causality
    Tachyons: Superluminal Particles
    Quantum Theory, Elementary Particles, Field and Absorber Theories and Radiation, Thermodynamics
    Time Arrow and Time Reversal
    Time and Space

What the various time allocations mean to the members of a particular society gives useful clues about their socio-cultural values. Some scholars believe time functions as a sort of "currency" for sociology, representing a measure of human preferences and values. Other scholars disagree (c.f., Robinson, 1972 and Linder, 1970).

Most of us are fortunate to master the conceptual values of time within our own culture (and sub-cultures); to expect to master other culture's time conceptions would be a formidable task. But, in conducting intercultural communication research, the communication scientist must give consideration to culturally derived differences in time values, orientations, and conceptualizations. And, by maintaining time disparities along cultural parameters, our intercultural research should constantly demonstrate an awareness of the diversity of human communicative behavior along temporal dimensions. The influence of time on human interaction, particularly the interaction of humans from different cultures deserves much more attention by communication scholars.

"The pressure to conform to the tempo of one's culture, one's social groups, and one's organizations can be very powerful in bringing about compliance. This compliance seems to be the fate of even the most temporally creative, unique persons" (Bruneau, 1979, p. 83).

Communication scientists have discovered that perceptions of time provide significant nonverbal cues that vary from one culture

to another (Porter, 1972). Yet, the significance of time as a major construct continues to be ignored by many who conduct intercultural research (c.f., Prosser, 1978).

A major misconception is that people in other cultures use the same basic unit of time that Americans do (i.e., the second). But, of course, the value and subsequent perspective of time varies from one culture to another. In some cases, these variations are slight; in other cases these cultural variations are significantly different. Ornstein again comments on this point: "Our general temporal perspective is derived from the kind of culture we live in. We in the West are very precise. We 'break' time up into small units; we can 'time' events very, very precisely. This concept is extremely useful in a complex, technological society. Our basic unit of time is the second as it has been for quite a while. We define it quite precisely as '...9,192,631,770 cycles of the frequency associated with the transition between two energy levels of the isotope cesium 133' (Astin, 1968). Nakamara (1966) points out that other cultures, who are much less technically oriented than we, have different basic units of time. One Indian culture used the time to boil rice as its 'basic unit'--how do you suppose that our technological culture could now get along with that sort of a basic unit? (Ornstein, 1969, p. 22).

Some cultures may not even be aware of time as a construct, but clearly there are cultural variations in its conceptionalization and perceived value. In American culture, being "on time," "late," or "early" for a business or social meeting sends a "message" for

evaluation. American culture and other cultures teach us how to interpret how members of that culture handle temporal matters. In Greece, a theatrical performance scheduled for 9:00 p.m. may actually begin at 9:30 or 9:45. Time spent in an activity is often a measure of interest or importance--a trivial matter can be dealt with in a short period of time; a difficult or important matter requires more time for careful consideration--thus, the way time is used reflects on both the person and the importance of the matter under consideration.

People living in different cultures may make different assumptions and attach variant interpretations about the same stimuli, may perceive things differently, and thus obtain different "messages" from identical stimuli.

Americans like to consider things sequentially and the variations of activity are most comfortable when discrete (one thing at a time). The silent language of a culture is usually embedded in that culture's time values (Hall, 1959, p. 19). Depending upon which culture you are in, the clock on the wall may appear the same, but it displays a different orientation toward time (Hall and Whyte, 1960, p. 5).

Time is so pervasive, such an ubiquitous factor, that it is as ignored as one might suppose a goldfish ignores water.

The past influences, shapes one's conception of the present and future expectations. Thomas Wolfe's classic novel You Can't Go Home Again illustrates that the past is gone--irretrievable. And try as we do, we cannot figure out a way to reclaim, reconstruct, or

resurrect the past. Time is permanently geared to the forward position, thus, time does not allow us a way to start all over--there is no "second chance," there is only now, the present.

Time awareness remains one of the most subjective and idiosyncratic human experiences. Only God has no beginning and no end.

Intercultural communication research can profit from an examination of human orientations toward conceptualization of time. Cultural time-values, orientations and conceptualizations have significant correlations with almost all human activities, but particularly with communicative behavior.

## REFERENCES

Astin, A. V. (1968). "Standards of Measurement," Scientific American, Vol. 218, pp. 50-63.

Bruneau, Thomas J. (1974). "Time and Nonverbal Communication," Journal of Popular Culture, Vol. 8, pp. 658-666.

Bruneau, Thomas J. (1976). "Silence, Mind-Time Relativity, and Interpersonal Communication." Paper presented at the Third Conference, International Society for the Study of Time, Alpback, Austria.

Bruneau, Thomas J. (1977). "Chronemics: The Study of Time in Human Interaction (with a Glossary of Chronemic Terminology)," Communication: Journal of the Communication Association of the Pacific, Vol. 6, pp. 1-30.

Bruneau, Thomas J. (1979). "Chronemics: Time and Organizational Communication," Communication: Journal of the Communication Association of the Pacific, Vol. 7, 81-94.

Fraser, Julius T. (1978). Time as Conflict: A Scientific and Humanistic Study. Birkhauser Verlag: Basel and Stuttgart.

Gordon, George N. (1977). The Communications Revolution: A History of Mass Media in the United States. New York: Hastings House.

Grunig, James E. (1976). Decline of the Global Village: How Specialization is Changing the Mass Media. Bayside, N. Y.: General Hall, Inc.

Hall, Edward T. (1959). The Silent Language. New York: Doubleday.

Hall, Edward T.; Whyte, William F. (1960). "Intercultural Communication: A Guide to Men of Action," Human Organization, Vol. 19, pp. 5-12.

Joseph, Earl (1974). "What Is Future Time?" The Futurist, Vol. 8, p. 178.

Krudy, Elmer S.; Bacon, Bernardine T.; Turner, Rollo (1976). Time: A Bibliography. Washington, D. C.: Information and Retrieval.

Linder, Staffan (1970). The Harried Leisure Class. New York: Columbia University Press.

Martin, James (1978). The Wired Society. Englewood Cliffs, N. J.: Prentice-Hall, Inc.

McDermott, John J. (1974). "Space, Time, and Touch: Philosophical Dimensions of Urban Consciousness," Soundings: An Interdisciplinary Journal, Vol. LVII, 253-274.

Nakamura, H. (1966). "Time in Indian and Japanese Thought," in ed., Fraser, J. T., The Voices of Time, Brazillier.

Ornstein, Robert E. (1969). On the Experience of Time. New York: Penguin Books Inc.

Parkinson, C. Northcote (1957). Parkinson's Law. New York: Ballantine.

Pember, Don R. (1977). Mass Media in America. Chicago: Science Research Associates.

Porter, Richard E. (1972). "An Overview of Intercultural Communication," in Intercultural Communication: A Reader, ed. Samovar, Larry A.; Porter, Richard E. Belmont, California: Wadsworth, pp. 3-18.

Prosser, Michael H. (1978). "Intercultural Communication Theory and Research: An Overview of Major Constructs," in Communication Yearbook 2: An Annual Review, ed. Ruben, Brent D. New Brunswick, N. J.: Transaction Books.

Robinson, John P. (1972). "Television's Impact on Everyday Life: Some Cross-National Evidence," in Television and Social Behavior, Vol. 4, ed. Rubinstein, Eli; Comstock, George; and Murray, John. Washington, D. C.: U. S. Government Printing Office.